

REMARKS/ARGUMENTS

These remarks are made in response to the Office Action of September 9, 2008 (Office Action). As this response is timely filed within the 3-month shortened statutory period, no fee is believed due. However, the Examiner is expressly authorized to charge any deficiencies to Deposit Account No. 50-0951.

Claim Rejections – 35 USC § 112

Claims 1, 3, 7, 10, 12, 16, 18, 20, and 24 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. More specifically, it was asserted that there is no indication in the disclosure that the inventor had possession of an invention that was carried out in real time in its entirety, or even that the final step of determining the actual cancellations is carried out in real time, only that the provision of financial data is performed in real time.

Although Applicants believe that the provision of real time financial data allows the cancellation decision to be made in real time to optimize the financial return to the airline, the limitation "in real time" has been deleted from the preamble of Claim 1. Claims 10 and 18 have been cancelled.

Claims 1, 3, 7, 10, 12, 16, 18, 20, and 24 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. More specifically, it was asserted that the scope of the claim is vague because the metes and bounds of what constitutes "other flight operation information" is not clear in light of the specification.

The wording "other flight operation information" has been deleted from Claim 1. Claims 10 and 18 have been cancelled.

Claim Rejections – 35 USC § 103

In the Office Action, Claims 1, 3, 7, 10, 12, 16, 18, 20, and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,314,361 to Yu, *et al.* (hereinafter Yu) in view of U.S. Published Patent Application 2003/0061085 to Lanigan, Sr. (hereinafter Lanigan).

Although Applicants respectfully disagree with the rejections, Applicants have amended Claim 1. Applicants have cancelled Claims 2-6 and 8-25. However, Applicants are not conceding that the remaining claims as originally formulated or the cancelled claims fail to present patentable subject matter. The amendments and cancellations are solely for the purpose of expediting prosecution. Accordingly, neither the amendments nor cancellations should be interpreted as the surrender of any subject matter, and Applicants expressly reserve the right to present the original version of any of the amended claims in any future divisional or continuation applications from the present application.

As discussed herein, the claim amendments are fully supported throughout the Specification. No new matter has been introduced by the claim amendments.

Aspects of Applicants' Invention

It may be helpful to reiterate certain aspects of Applicants' invention prior to addressing the cited references. One embodiment of the invention, as typified by amended Claim 1, is a method for determining flight cancellations.

The method can include detecting a flight cancellation condition, and determining at least two flight cancellation candidates using flight operations data, including equipment, crew, and plane availability.

The method also can include obtaining in real time flight financial data from at least one flight financial data store for the at least two flight cancellation candidates, and

processing the flight financial data for the flight cancellation candidates to determine for each flight cancellation candidate an amount of revenue lost by canceling a flight corresponding to a particular flight cancellation candidate. The flight financial data includes a value of passenger tickets, a value of cargo, a value of United States Postal Service (USPS) mail, and cost associated with operating an aircraft of each of the at least two flight cancellation candidates including crew and fuel cost. Amounts of revenue can include values for time-critical cargo and coupons held by passengers assigned to each flight corresponding to the particular flight cancellation candidate.

The method further can include presenting for each flight cancellation candidate the amount of revenue lost determined based upon the financial data for the flight cancellation candidates, and selecting from among the at least two flight cancellation candidates a flight cancellation candidate and canceling the flight corresponding to the selected flight cancellation candidate if the amount of revenue lost by canceling the corresponding flight is less than the revenue lost by canceling any other flight corresponding to a non-selected flight cancellation candidate. See, e.g., Specification, paragraphs [0025] to [0030].

The Claims Define Over The Prior Art

There are times in the commercial flight industry that flights must be cancelled. The reasons for cancellations vary, and can include aircraft mechanical problems, crew availability, weather conditions and the like. Cancellation decisions can be made based upon the affected flight, namely, in the case of a crew or mechanical problem, the flight to which the problem is directly associated is cancelled. Alternatively, equipment and crews can be redeployed so that the affected flight continues as scheduled and a different flight is cancelled or delayed. Financial considerations are sometimes taken into account in this decision process, however, the financial data that is used does not always provide

useful or accurate information. See Specification, paragraph [0002].

The present invention provides a method for determining flight cancellations, which can include obtaining flight financial data from at least one flight financial data store for at least two flight cancellation candidates. The flight financial data is processed for the flight cancellation candidates and the financial data for the flight cancellation candidates can be presented. The method further can include canceling at least one of the flight cancellation candidates based upon the presented financial data. The flight financial data can be any suitable data. In one aspect, the flight financial data can include, but is not limited to, cargo, United States Postal Service (USPS) mail, passenger ticket value, and fuel requirements data. The flight financial data can be provided in substantially real time. The provision of real time data allows the cancellation decision to be made to optimize the financial return to the airline. Flight operations data can also be utilized in the comparing step. The flight operations data can include crew and equipment considerations, as well as other flight operations considerations. The flight operation data can include cargo, crew, reservations, and other flight operations information. The flight operation data can be utilized to determine at least one flight cancellation candidate. See Specification, paragraphs [0003] to [0005].

Yu discloses an automated, real-time decision support system for reassigning, rescheduling, and rerouting aircraft in response to flight operation disruptions, in which sets of optimal solutions are provided through use of evaluation statistics to assist operations management in selecting the optimal solution best conforming to operational constraints and user requirements. Solutions are generated through the execution of unary operations, binary operations, three-way operations, and reverse binary operations on grounded aircraft routes, available aircraft routes, and phantom routes of implicitly cancelled flights. Solutions are evaluated for feasibility with respect to operations constraints and user requirements. Marginal value calculators are used to differentiate

feasible solutions and identify optimal solutions. The marginal value calculators are dynamic, hierarchical calculators that permit use of multiple, prioritized, and weighted route and operation attributes in comparing solution values. Marginal value calculators are selected by means of a decision tree. See the Abstract.

Clearly, Yu concerns rerouting and rescheduling of aircraft in light of flight schedule disruptions, not determining which flight to cancel among at least two flight cancellation candidates as in the present invention. Therefore, the subject matter of Yu is totally different from the subject matter of the present invention. Although Yu can take into consideration of cancelled flights in the calculation in making rerouting and rescheduling decisions (for example, the routes of the cancelled flights can be used as phantom routes in calculating a new route), Yu does not disclose how a flight cancellation decision is made.

It is also noted that an important aspect of the present invention is the utilization of the real time flight financial data so that the flight cancellation decision is made based on updated, not outdated financial data. Although Yu mentions a real-time decision support system for reassigning, rescheduling, and rerouting aircraft in response to flight operation disruptions (see, e.g., col. 4, line 33), Yu does not disclose that real time financial data is utilized in the real-time decision support system. It is described in col. 7, lines 38-41 of Yu that: "The term 'real time' is used in the sense that the optimization engine of the present invention creates multiple solutions to an operations problem in less than a minute, and usually in mere seconds." Clearly, in Yu the term "real time" refers to the operation of the optimization engine, not the characteristic of the financial data.

Lanigan describes in paragraph [0038]:

[0038] Thus, a new system for airline passenger transportation is provided, resulting in substantial savings of cash and other advantages: of cash because the turnaround time of airliners can be greatly reduced, resulting in great financial savings, while the airliners will have substantial extra capacity for more passengers and express cargo for which a charge

can be made. At the same time, much of the airline load (the baggage) which now flies from the congested central airports can either fly in the form of cargo planes in the small hours of the morning from the major airport, or from other airports at any time of day or night, to greatly reduce the congestion and difficulty involved in high-volume passenger air travel. The sharing of airplanes between airlines for their passenger travel is also facilitated, resulting in profitable alliances plus fewer flights without a loss of passenger mile capacity. The fewer flights of course, further reduce delays, further reducing heavy cost to the airlines.

As can be clearly seen from the above paragraph, Lanigan basically states that due to the decoupling of a passenger's luggage from the passenger, the airliner will have substantial extra capacity for more passengers and express cargo for which a charge can be made. This has nothing to do with the concept of making flight cancellation decisions based on an amount of revenue lost by canceling a flight corresponding to a particular flight cancellation candidate, wherein amounts of revenue include values for time-critical cargo, of the present invention.

Accordingly, the cited references, alone or in combination, fail to disclose or suggest each and every element of Claim 1, as amended. Applicants therefore respectfully submit that amended Claim 1 defines over the prior art. Furthermore, as each of the remaining claims depends from Claim 1 while reciting additional features, Applicants further respectfully submit that the remaining claims likewise define over the prior art.

Applicants thus respectfully request that the claim rejections under 35 U.S.C. § 103 be withdrawn.

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Amendment dated October 14, 2008
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CONCLUSION

Applicants believe that this application is now in full condition for allowance, which action is respectfully requested. Applicants request that the Examiner call the undersigned if clarification is needed on any matter within this Amendment, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

AKERMAN SENTERFITT

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/Gregory A. Nelson/
Gregory A. Nelson, Registration No. 30,577
Yonghong Chen, Registration No. 56,150
Customer No. 40987
Post Office Box 3188
West Palm Beach, FL 33402-3188
Telephone: (561) 653-5000